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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,584	04/25/2005	Yeongchang Liang	LIANG14	4286
1444	7590	10/26/2005	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			TA, THO DAC	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/532,584	LIANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tho D. Ta	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/25/05</u> .                                                             | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbott et al. (6,671,808) in view of Plyler et al. (5,145,402).

In regard to claims 1-4, Abbott et al. discloses an information means 200 comprising: a USB connector 220 having a plug portion for connection to an external terminal, and a plurality of contacts 302 mounted therein and extending to the plug portion for the contact of the external terminal to which the plug portion is connected for transmission of a signal; an electric device 206 connected to the connector for data storage and transmission, the electric device 206 having a circuit electrically connected to the contacts 302; and an outer layer 202, 204 surrounding a part of the connector 220 and the whole area of the electric device 206; wherein the electric device 206 comprises a light emitting element 216; the outer layer 202, 204 has a light guide 244 mounted therein for guiding light from the light emitting element 216 to the outside of the information means 200.

However, Abbott et al. does not disclose a transparent waterproof member is made of a material that blocks the transfer of heat energy, having an inner layer

surrounding the electric device 206 and filling up gaps in the connector around the contacts and the connection area between the contacts and the electric device 206.

Plyler et al. discloses disclose a waterproof member 68 is a transparent member, the waterproof member 68 having an inner layer surrounding the electric device 30 and filling up gaps in the connector around the contacts 28 and the connection area between the contacts 28 and the electric device 30 for sealing, protecting and preserving electrical characteristics (column 4, lines 7-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abbott et al. invention by providing the waterproof member as disclosed by Plyler et al. in order to seal, protect and preserve electrical characteristics.

In regard to claim 6, Abbott et al. discloses that the outer layer 202, 204 comprises a through hole 228 for hanging.

In regard to claim 7, Abbott et al. discloses that the connector 220 comprises a metal cover 602 around a periphery thereof.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abbott et al. and Plyler et al. as applied to claim 1 above, and further in view of Wu (6,522,534).

Abbott et al. as modified by Plyler et al. has been discussed above.

Abbott et al. does not disclose a waterproof cap surrounding the terminal to which the plug portion is connected, the waterproof cap comprising a body capped on the outer layer around the connector and a water division means extending around an inside wall of the body and forced into engagement with water division means provided at the outer layer to seal off outside water.

Wu discloses a waterproof cap 12, 18 surrounding the terminal to which the plug portion is connected, the waterproof cap comprising a body capped on the outer layer around the connector 15 and a water division means 122 extending around an inside wall of the body and forced into engagement with water division means 151 provided at the outer layer to seal off outside water.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Abbott et al. invention by providing the waterproof cap as disclosed by Wu in order to seal the connector and provide a better information means.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**THO D. TA**  
**PRIMARY EXAMINER**